

Claims

What is claimed is:

1. A method of percutaneously implanting a first component and a second component of an orthopaedic assembly into a body of a patient, comprising the steps of:
- 5 securing a first instrument to said first component;
 advancing said first component into said body;
 advancing said first instrument into said body such that a portion of said first instrument extends out of said body;
 securing a second instrument to said second component;
10 advancing said second component into said body;
 advancing said second instrument into said body such that a portion of said second instrument extends out of said body; and
 advancing a third instrument into contact with both said first instrument and said second instrument so as to position said first component and said second component in a predetermined position relative to one another.
- 15 2. The method of claim 1, wherein said step of securing said first instrument to said first component is performed prior to said step of advancing said first component into said body.
- 20 3. The method of claim 1, wherein said step of securing said first instrument to said first component is performed subsequent to said step of advancing said first component into said body.
- 25 4. The method of claim 1, wherein:
 said step of advancing said first component into said body includes the step of securing said first component to a bone within said body, and
 said step of advancing said third instrument into contact with both said first instrument and said second instrument includes the step of moving said second component into contact with said first component.
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5 5. The method of claim 1, wherein:
said first component includes a bone screw,
said second component includes a bone plate,
said step of advancing said first component into said body includes the
step of screwing said bone screw into a bone within said body, and
said step of advancing said third instrument into contact with both said
first instrument and said second instrument includes the step of moving said bone plate
into engagement with said bone screw.

10 6. The method of claim 5, wherein:
said bone screw has a flange secured thereto,
said bone plate has a channel defined therein, and
said step of advancing said third instrument into contact with both said
first instrument and said second instrument includes the step of moving said flange into
15 said channel.

20 7. The method of claim 1, wherein:
said first instrument has a first recess defined therein,
said second instrument has a second recess defined therein,
said third instrument has an alignment member extending therefrom, and
said step of advancing said third instrument into contact with both said
first instrument and said second instrument includes the step of advancing said alignment
member into both said first recess and said second recess.

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8. An instrument assembly for percutaneously implanting an orthopaedic assembly having a first orthopaedic component and a second orthopaedic component, said instrument assembly comprising:

5 a first instrument which is adapted to be secured to said first orthopaedic component, said first instrument having a first alignment feature;

a second instrument which is adapted to be secured to said second orthopaedic component, said second instrument having a second alignment feature; and

10 a third instrument having a third alignment feature which is adapted to cooperate with said first alignment feature and said second alignment feature so as to position said first instrument and said second instrument in a predetermined position relative to one another, thereby positioning said first orthopaedic component and said second orthopaedic component relative to each other.

15 9. The instrument assembly of claim 8, wherein said first instrument is further adapted to be secured to said first orthopaedic component prior to implantation of said first orthopaedic component into a body of a patient.

20 10. The instrument assembly of claim 8, wherein said first instrument is further adapted to be secured to said first orthopaedic component subsequent to implantation of said first orthopaedic component into a body of a patient.

25 11. The instrument assembly of claim 8, wherein:
said first orthopaedic component includes a bone screw which is adapted to be screwed into a bone,

said second orthopaedic component includes a bone plate which is adapted to be secured to said bone screw, and

30 said third alignment feature is further adapted to cooperate with said first alignment feature and said second alignment feature so as to position said bone plate in contact with said bone screw during movement of said second instrument with said bone plate secured thereto.

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12. The instrument assembly of claim 11, wherein:
said bone screw has a flange secured thereto,
said bone plate has a channel defined therein, and
said third alignment feature is further adapted to cooperate with said first
5 alignment feature and said second alignment feature such that said flange is advanced
into said channel during movement of said second instrument with said bone plate
secured thereto.

13. The instrument assembly of claim 8, wherein:
10 said first alignment feature includes a first recess defined in said first
instrument,
said second alignment feature includes a second recess defined in said
second instrument,
said third alignment feature includes an alignment member extending from
15 said third instrument, and
both said first recess and said second recess are adapted to receive said
alignment member therein.

14. A method of percutaneously securing a bone plate to a bone within
20 a body of a patient, comprising the steps of:
securing a screw locating instrument to a bone screw;
screwing said bone screw into said bone;
advancing said screw locating instrument into said body such that a
portion of said screw locating instrument extends out of said body;
25 securing a plate locating instrument to said bone plate;
advancing said bone plate into said body;
advancing said plate locating instrument into said body such that a portion
of said plate locating instrument extends out of said body; and
advancing an alignment instrument into contact with both said screw
30 locating instrument and said plate locating instrument so as to position said bone screw
and said bone plate in a predetermined position relative to one another.

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15. The method of claim 14, wherein said step of securing said screw locating instrument to said bone screw is performed prior to said step of screwing said bone screw into said bone.

5 16. The method of claim 14, wherein said step of securing said plate locating instrument to said bone plate is performed prior to said step of advancing said bone plate into said body.

10 17. The method of claim 14, wherein:
said bone screw has a flange secured thereto,
said bone plate has a channel defined therein, and
said step of advancing said alignment instrument into contact with both
said screw locating instrument and said plate locating instrument includes the step of
advancing said alignment instrument into contact with both said screw locating
15 instrument and said plate locating instrument such that said flange is received into said
channel.

20 18. The method of claim 14, wherein:
said screw locating instrument has a first recess defined therein,
said plate locating instrument has a second recess defined therein,
said alignment instrument has an alignment member extending therefrom,
and

25 said step of advancing said alignment instrument into contact with both
said screw locating instrument and said plate locating instrument includes the step of
advancing said alignment member into both said first recess and said second recess.

30 19. The method of claim 14, further comprising the steps of:
securing a screw targeting instrument to said plate locating instrument,
said screw targeting instrument having a number of openings defined therein; and
advancing a screw driving instrument through one of said number of
openings defined in said screw targeting instrument subsequent to said step of securing
said screw targeting instrument to said plate locating instrument.

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20. The method of claim 19, wherein:

5 said step of advancing said alignment instrument into contact with both said screw locating instrument and said plate locating instrument includes the step of advancing said alignment instrument into contact with both said screw locating instrument and said plate locating instrument such that said bone screw engages said bone plate, and

10 said step of securing said screw targeting instrument to said plate locating instrument is performed subsequent to said step of advancing said alignment instrument into contact with both said screw locating instrument and said plate locating instrument such that said bone screw engages said bone plate.

21. An instrument assembly for percutaneously implanting a hip screw and a bone plate, comprising:

15 a screw locating instrument which is adapted to be secured to said hip screw, said screw locating instrument having a first alignment feature;

a plate locating instrument which is adapted to be secured to said bone plate, said plate locating instrument having a second alignment feature; and

20 an alignment instrument having a third alignment feature which is adapted to cooperate with said first alignment feature and said second alignment feature so as to position said screw locating instrument and said plate locating instrument in a predetermined position relative to one another thereby positioning said hip screw and said bone plate relative to one another.

22. The instrument assembly of claim 21, wherein said plate locating instrument is further adapted to be secured to said bone plate prior to implantation of said bone plate into a body of a patient.

23. The instrument assembly of claim 21, wherein said screw locating instrument is further adapted to be secured to said hip screw prior to implantation of said hip screw into a body of a patient.

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24. The instrument assembly of claim 21, wherein:
said hip screw has a flange secured thereto,
said bone plate has a channel defined therein, and
said third alignment feature is further adapted to cooperate with said first
5 alignment feature and said second alignment feature such that said flange is advanced
into said channel during movement of said plate locating instrument with said bone plate
secured thereto.

25. The instrument assembly of claim 21, wherein:
10 said first alignment feature includes a first recess defined in said screw
locating instrument,
said second alignment feature includes a second recess defined in said
plate locating instrument,
said third alignment feature includes an alignment member extending from
15 said alignment instrument, and
both said first recess and said second recess are adapted to receive said
alignment member therein.

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